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A D O Z E N A T T R I B U T E S  
Of The  
I D E A L E X T E N S I O N W O R K E R

ABOUNDING FAITH

in the importance of the work;

INFINITE TACT

in meeting trying situations;

UNLIMITED PATIENCE

in overcoming community inertia;

ENDLESS GOOD NATURE

in the face of all trials;

A SAVING SENSE OF HUMOR

when nothing else will meet the situation;

A LARGE VISION

of the work to be done;

ABILITY TO LOSE GRACEFULLY

and to rebound after each defeat;

INDOMITABLE COURAGE

in standing for the right;

A GRIM DETERMINATION

to see the work put through to its completion;

A CONTAGIOUS ENTHUSIASM

that inspires local leadership;

UNQUENCHABLE OPTIMISM

in spite of all discouragements;

UNRESERVED BELIEF IN THE IMPORTANCE OF THE

FARM FAMILY TO THE COMMONWEALTH....

--Vivian



The Relationship of the Extension Division  
to the  
Experiment Station and Teaching Divisions

By Benjamin W. Ellis  
Director, Extension Service

I welcome this opportunity to bring to you a brief picture of the purpose, organization, and work of the extension division and its relationship to the other divisions. I think each one of us as members of the staff of a Land-Grant College should and does have an interest in the entire program of the college as carried out through the three divisions--Resident Teaching, Experiment Station, and Extension.

The Federal Smith-Lever Act which provides funds for the support of extension work states:

"That cooperative agricultural extension work shall consist of the giving of instruction and practical demonstrations in agriculture and home economics to persons not attending or resident in said colleges in the several communities, and imparting to such persons information on said subjects through field demonstrations, publications, and otherwise; and this work shall be carried on in such manner as may be mutually agreed upon by the Secretary of Agriculture and the State agricultural college or colleges receiving the benefit of this act."

In another section of the bill which refers to this instruction we find the statement, "and to encourage the application of the same."



Through definitely planned programs we are endeavoring to interest the men, women, and boys and girls on the farms and in the rural homes of Connecticut to adopt better practices in order that there may be a profitable and economically sound agriculture and a satisfying home and community life.

The first extension teaching was done by members of the teaching staff of the college in response to requests from farmers for information. Later the members of the station staff assisted in this work. The demands for speakers at various agricultural meetings increased to such an extent that our college historian, Walter Stemmons, records the fact that college classes were sometimes abandoned in order to meet these requests. In 1909 the trustees recommended that funds be secured with which to hire special instructors to do extension teaching. In the meantime the experiment stations had accumulated a vast amount of scientific information which leaders in the educational movement realized should be put into the hands of farmers. As a result of these two developments, a demand for information by farmers and a realization that they were not using a great deal of information that was available, the third great function of the Land-Grant Colleges was established.



The first state appropriation for extension work in Connecticut, of \$5000 annually for two years, was passed in 1913 and the extension division of the college was established the same year. Extension work as we know it today really began with the passage of the Smith-Lever Act in 1914 which provided for cooperative federal and state support. The original appropriation has been increased from time to time and federal and state funds have been supplemented with county and private monies, and today we have an extension teaching staff of 55 men and women. The number in the United States is nearly 6000.

Several pioneers in extension work in Connecticut are still connected with the college. Mr. Hollister was the first extension specialist in fruit growing. Mr. Brundage, our state club leader, and Mr. Jones, our poultry specialist, are charter members of the extension staff. Mr. Manchester was one of the first county agents to be appointed. Mr. Davis assisted in the organization of several of the county Farm Bureaus most of which were organized in 1915.

The present staff includes the supervisory officers in agriculture, homemaking, and 4-H club work, known as state leaders, the state specialists and the county agents. The state leaders and specialists have headquarters at



Storrs and work throughout the state in cooperation with the county agents. There are specialists in farm management, fruit growing, dairying, vegetable gardening, crops, poultry raising, forestry, apiculture, animal husbandry, economics, clothing, nutrition, home management, and rural health.

Each county has at least three agents, an agricultural agent, a home demonstration agent, and a boys' and girls' club agent. The county agents have headquarters at the respective county Farm Bureau offices. Extension work in Connecticut is carried on under a cooperative agreement which provides for all extension workers - specialists and county agents - to be representatives of the United States Department of Agriculture and the Connecticut Agricultural College. The Farm Bureau is an organization of farmers and other interested people of the county formed for the purpose of improving agriculture and country life and particularly to cooperate with the United States Department of Agriculture and the college in employing county agents and in carrying on extension work. Through membership fees the Farm Bureau raises at least one thousand dollars, which is required by the state law before state and county funds become available for the support of extension work.

One of the most important phases of the entire exten-



sion system is the fact that it provides for local people to assist in planning the program. Over 1500 Farm Bureau officers, directors, members, and other local people in Connecticut are giving generously of their time and thought to help plan and carry out the extension program. Effective extension teaching depends very largely upon the number of people actively participating in it and the responsibility which they assume.

The state specialists and county agents are working on a common program for the improvement of agriculture and country life. We are giving more and more attention to the coordination of their work in order that the greatest possible efficiency may result. They assist the farmers in solving the problems of production and marketing and the homemaker with the problems of maintaining the efficiency and comfort of the farm home and the health of the family.

Our 4-H clubs are helping rural boys and girls to

1. Realize upon the opportunities around them.
2. Test their fitness and desire for farm life.
3. Develop the habit of achievement through doing their work well.
4. Learn to cooperate through a work and play program which they plan largely themselves.
5. Develop their leadership ability.
6. Demonstrate better practices on the farm and in the home.



One of the first objectives of the extension program is to help the farmer make more net profit from his business. A larger task is to help improve standards of living. We want farming to provide an income that will equip farm homes with running water, electricity, bath rooms, and other conveniences which everyone in this room enjoys but which are lacking in far too many country homes. An aim beyond better crops, better livestock, and better marketing is the development of people and the providing of opportunities through which they may develop themselves. Nearly everyone in these days recognizes that the prosperity of a nation depends upon an adequate food supply and a successful and contented agricultural industry. C. W. Pugsley, while Assistant Secretary of Agriculture, made this statement in speaking of agricultural education: "I think all of us here will accept without argument the statement that farm life must be satisfying if it is to be permanent. It certainly must be permanent if our nation is to endure."

Our teaching problem is not one of merely passing out information. It involves interesting people to change their habits and give up old ways for those which lead to greater satisfaction in conducting the business of farming, better standards of living and the development of individuals. One county agent has said that it is the job of every extension worker to "interest people to want what they need as well



as to tell them how and when to do things." Extension work aims to teach practices which solve the problems of large numbers of farmers rather than to teach in terms of the formal class room course.

Repetition has found its place in extension teaching and we are using demonstrations, meetings, leaflets, news stories, farm and home visits, 4-H clubs, illustrative material, and many other agencies to remind people of the need for improving their practices.

In the early years of extension work there was a lack of program, and farm visits formed a major part of the county agents' and specialists' work. We have learned, however, that we have a far bigger task if we would leave an imprint upon the agriculture or home life of the county or state. As leaders, we must foresee the fundamental problems which retard agricultural improvement and develop a well planned program which gives an answer to the larger problem.

The well planned program contains a statement of the problem, a practical, economical solution expressed in practices that may be adopted with ease and profit, and the teaching agencies and methods to be used in developing the five steps in learning: Attention, Interest, Desire, Action, and Satisfaction. Our programs in agriculture, homemaking, and 4-H club work are developed by the extension specialists and county agents with the assistance of local people.



The method used in developing a program is suggested in the following illustration: Each county has a Dairy Farm Improvement Program based on facts that were secured from one thousand dairy farm surveys taken by county agents and specialists. After the survey information was tabulated and summarized, the important factors were assembled and reviewed by the specialists and county agents, and the methods to be used in preparing a dairy improvement program were determined.

It was decided to ask committees of county dairymen to meet at Storrs for two days to assist in developing the individual county programs. Representatives of the station and teaching divisions were invited to attend these program conferences. The county agents with the aid of the Farm Bureau presidents invited leading dairymen to act on these committees and met with very favorable response. The members of the committees came to Storrs at their own expense and gave two days to dairy program consideration. The dairy, crop, and farm management specialists presented the survey facts on the first day and the committee devoted the second day to a consideration of the dairy problems of the county as brought out by the survey, and the steps that should be taken to meet them.

County committees from each county, with one exception, met at Storrs and the printed county programs which express



the best thought of local dairymen are the result. The programs include improvement work in dairying, crop growing, and farm organization. In some instances committee members have returned home and presented the program material at local meetings. I think the plan used in developing this dairy program is one of the finest developments we have made in enlisting the cooperation of farm leaders to help us to plan extension programs, and I believe it will be possible to carry the idea into other projects.

The definiteness with which these committees worked is indicated in the following recommendation prepared by one committee:

#### Dairy Feeding and Management

1. Grain rations cannot profitably exceed 20 % at any time.
2. Most dairymen are unduly increasing their grain bills by overfeeding their milking cows.
3. Too little grain is fed dry cows and young stock.
4. The majority overfeed silage or hay and many overfeed both.
5. Skim milk powder will raise just as good calves as whole milk and at lower cost.

#### Disease Control

6. Freedom from disease is directly related to number of cattle purchased annually.



### Breeding

7. The use of better purebred bulls means milking fewer cows. Everyowner of a purebred bull should prove him.
8. Lime must be used on every new seeding if lower feeding costs are desired.

### Pastures

9. Fewer and better acres of pasture are needed.

### Farm Management

10. Every successful dairy farm must keep 10 - 12 cows per man.
11. The income of any farm depends primarily on the amount of business done.

After the county programs were planned a conference of county agents and specialists was held at which the phases of the programs to be emphasized this year and the teaching methods to be used were agreed upon.

The county homemaking committee and the home demonstration agent arranged for a meeting which was attended by representatives of 18 local county extension groups, the county 4-H club committee, the Visiting Nurses Association and the nutrition and health specialists. Health and nutrition problems were discussed. The result was a decision to carry forward a long-time program which would lead to the development of better teeth. The preliminary work of calling the program to the attention of people throughout the county



included a meeting of dentists arranged by the secretary of the Chamber of Commerce who endorsed the program and agreed to assist in every way possible. School supervisors were informed of the plans, and they requested that a talk relating to the care of teeth, and foods and their relation to better teeth, be given in the schools. Similar talks were given by the health and nutrition specialists to parent-teacher groups. The cooperation of many interested organizations will aid in securing a wide-spread influence through the Better Teeth project.

Extension work is financed by state, county, federal, and Farm Bureau membership funds. There are six different federal funds each with its special requirement as to expenditure. There are state appropriations to the college and to the Farm Bureaus. All the federal funds come to Connecticut through the college. A summary of the sources of extension funds including an income statement for one of the larger counties is given on pages 12 and 13.



# FEDERAL FUNDS AVAILABLE FOR EXTENSION WORK

1930 - 1931

|                                         | <u>Amount</u> | <u>Purpose</u>                                                                                                                                                 | <u>Remarks</u>                                                                  |
|-----------------------------------------|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|
| Smith-Lever Fund                        | *\$45,442.29  | Salaries, Travel, Supplies.                                                                                                                                    | All but \$10,000 must be matched with State funds. None apportioned to counties |
| Supplementary Smith-Lever Fund          | * 13,615.29   | 82% must be spent on salaries of county agents. 18% same as Smith-Lever.                                                                                       | Full amount must be matched with State funds.                                   |
| Additional Co-operative Fund            | * 7,000.00    | Special emphasis on economics work.                                                                                                                            | Full amount must be matched with State funds.                                   |
| Clarke-McNary Fund                      | * 1,200.00    | Forestry only.                                                                                                                                                 | Full amount must be matched with State funds.                                   |
| Capper-Ketcham Fund                     | * 24,308.64   | 80% must be spent on salaries of county agents to further develop the work, in fair and just proportion for men and women agents. Balance same as Smith-Lever. | \$20,000 does not have to be matched with State funds.                          |
| Farmers' Cooperative Demonstration Fund | ** 11,250.00  | Salaries of county agents, state leaders, and farm management demonstrators. Preferably not to exceed \$600 per annum per worker.                              | Does not have to be matched with State funds.                                   |
| Total Federal Funds                     | \$102,816.22  |                                                                                                                                                                |                                                                                 |

\* Disbursed by State treasurer.  
 \*\* Disbursed by United States treasurer.



# STATE AND COUNTY FUNDS AVAILABLE FOR EXTENSION WORK

1930 - 1931

|                                                                      |                  |
|----------------------------------------------------------------------|------------------|
| State Funds (Connecticut Agricultural College)                       | \$80,000.00      |
| State Funds (Portion of Special Sheep Fund)                          | 2,800.00         |
| State Funds (\$6000 direct to each County Farm Bureau - 8 counties.) | 48,000.00        |
| County Funds (Vary from \$2000 to \$11,500 per county)               | 38,500.00        |
| Membership Fees and Other Sources                                    | <u>20,261.00</u> |
| Total State and County Funds                                         | \$189,561.00     |

## SUMMARY OF ALL FUNDS

|               |                  |
|---------------|------------------|
| Federal Funds | \$102,816.22     |
| State Funds   | 130,800.00       |
| County Funds  | 38,500.00        |
| Other Funds   | <u>20,261.00</u> |
| Total Funds   | \$292,377.22     |

## COUNTY BUDGET INCOME STATEMENT

|                  |                 |
|------------------|-----------------|
| Federal Funds    | \$ 5,100.00     |
| State Funds      | 6,000.00        |
| County Funds     | 11,500.00       |
| Membership Funds | <u>3,500.00</u> |
| Total            | \$26,100.00     |



With this very condensed description of the extension division before you let us consider more definitely the topic of this talk, "The Relationship of the Extension Division to the Experiment Station and Teaching Divisions."

I think most of us appreciate that there are many different viewpoints regarding this subject. The relationship between the Extension Division and the Experiment Station has been considered at the annual meeting of the Land-Grant College Association in 1926 under the topic, "The Twilight Zone Between Research and Extension."

In the early years, as I have mentioned, extension teaching was done by members of the instruction and station staffs whose primary work was the teaching of resident students and the conducting of investigations.

Often the complete process from the station to the classroom to the farm was centered in one individual and the problem of correlation of effort was readily taken care of.

The present division of labor among the three divisions has been a logical and natural development, but their functions are so interrelated that close cooperation and understanding is necessary if the college as a Land-Grant Institution is to meet its full responsibility in the field of agriculture.

It is generally understood, I think, that it is the province of the subject-matter and station divisions to accumulate the knowledge, and the work of the extension staff to



carry the knowledge to the people. As a result of the division of labor the extension worker has taken over most of the field contacts with farmers.

I doubt, however, if the teacher and the investigator can be sensitive to the most pressing problems that are retarding economic and social progress unless they continue to have contact with the farm or the farm home.

The extension teacher is in constant touch with the practical problems of the farmer and the farm homemaker. The urge to do something to help is much greater if we see the chicks dying from white diarrhoea or learn at first hand the health problems of the children on the farm than it is if we read about these problems at long range. It is a part of the extension worker's responsibility to aid in keeping the research person informed regarding changing conditions which frequently call for the development of new production and marketing methods. In a similar way the extension program needs the guidance of the research person and the resident instructor.

Dean A. R. Mann of the New York State College of Agriculture in an address at the annual meeting of the Land-Grant College Association in 1923 made this statement, "The major business of the colleges and stations is to deal with the fundamental permanent needs of the agriculture of the respective states in long-time programs."



If the largest results are to be achieved the extension program should be developed through and with the closest cooperation of the extension teacher, the resident teacher, and the investigator. As members of the staff of a Land-Grant College, I think we have a responsibility to the state and to the public at large to cooperate to the fullest extent in developing and carrying forward a common program in the interest of a prosperous agriculture that will result in the greatest possible good to the citizens of the state.

The need for cooperation has been appreciated and I wish to refer to a few of the methods that have been used to bring the three agencies into close contact.

I mentioned that station and teaching staff members were invited to attend our dairy program meetings. Last Monday Mr. Davis arranged for Mr. Wilkinson, Extension Vegetable Specialist, and Professor Stevens to attend a meeting of the Economics Department which was called to consider a research project in vegetable and fruit marketing which will be carried on by Mr. Clarke, Assistant Extension Economist. I was invited to attend but was unable to go because I had planned to be at a similar meeting arranged by Professor White which considered a dairy disease problem. Members of the three divisions were present, including a county agent who brought two farmers with him.

Our annual agricultural outlook meeting provides an



opportunity for the entire college staff to meet and look into the future with reference to agricultural problems. For several years members of the station and teaching staffs have taken part in our program conferences of county agricultural agents. Not long ago a meeting with the three divisions represented was held to talk over plans for our program for the control of chicken pox. Last winter a committee meeting was held at the New Haven Experiment Station to discuss the extension program for vegetable insect and disease control. Mr. Stevens and several station representatives attended, in addition to the extension people. It has since occurred to me that I should have asked Mr. Manter and Mr. Torrey to join us.

There have been joint meetings of extension and station workers to consider research work.

Recently Dr. Denlinger gave our boys' and girls' work some very helpful assistance by addressing two county meetings of leaders.

The question of relationships and correlation of effort is being met in many ways. There is a place for the department conference, the division conference, and there may well be more meetings of the entire staff with programs which will aid in keeping all groups informed of what other groups are doing. It seems to me, however, that the questions will be answered in the most satisfactory way if definite



consideration is given to the need, and a program developed which would aid in promoting a larger understanding regarding the services which are expected of the different divisions. A closer feeling of relationship and a greater correlation of effort will come through this better understanding.

I wish to recommend, Dr. McCracken, that you consider the advisability of appointing a committee to consider the many phases of the question and to make recommendations.

Returning now to the extension program, I have planned to give you a visual picture of some of the results of extension teaching. It is hardly necessary for me to say that it is very difficult to find satisfactory yard sticks with which to measure the results of educational work.

How can we measure the value of improved health which has resulted in better food habits, the energy saved through better equipped farm kitchens or the knowledge and experience which every 4-H club boy and girl receives. One of our larger results has been the development of agricultural leadership which is represented in the increased interest that farm people, men, women, and boys and girls, are taking in the cause of a more prosperous agriculture. The number of better practices adopted or dollars gained can hardly equal these greater and more far-reaching results.

We do have a few figures which indicate that food production per acre, per man and per unit of livestock has



greatly increased. These are important yard sticks in measuring the efficiency of agriculture. In giving consideration to the question of accomplishments it must be borne in mind that many agencies carry information to the farmer, although the chief responsibility for extension teaching in agriculture and homemaking rests with the Extension Service.

Before referring to a few of our many activities, I want to call to your attention a viewpoint expressed by Dr. Sidney B. Haskell to our extension group in 1922 in an address entitled, "What Are We Trying To Do?" At that time he was Director of the Massachusetts Agricultural Experiment Station at Amherst. In speaking of the work of the agricultural colleges, he said: "First, take our old friend, the potato, the least costly of staple vegetable foods. True, it costs more today, relatively and absolutely, than it did thirty, forty and fifty years back; but had it not been for the work of our experiment stations, ably supplemented by the work of our extension services, there would today be no potato crop. The myriads of insects which now attack it, and of plant diseases which now infest it, would have long since driven it out of existence as a staple food crop."

He referred to the national economic importance of the work that has been done to maintain soil fertility and



the methods which have been developed to control hog cholera and insect pests and plant diseases in a similar way. He emphasized his point by calling attention to the fact that the stations were unable to combat the chestnut blight with the result that our chestnut forests have disappeared.

Most of the facts that I shall present with the use of stereopticon slides will be found in the reports as listed in the bibliography on page 21.

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U. S. D. A.

Connecticut Agricultural College

Agricultural Department

Homemaking Department

Experiment Station

Extension Service

Resident Instruction

County Farm Bureau

Home Agent

Agricultural Agent

Club Agent

County and Local Committees

Meetings - Demonstrations - Farm and Home Visits - Bulletins - Letters

Women

Men

Boys - Girls









